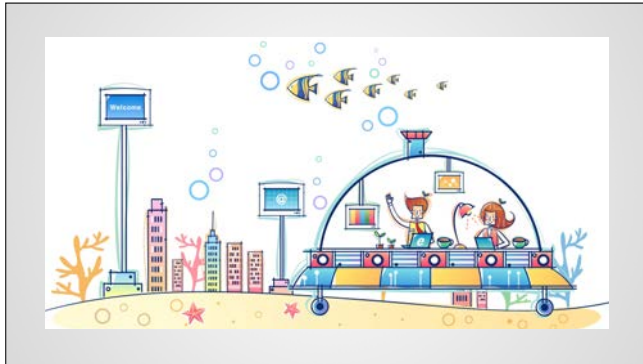
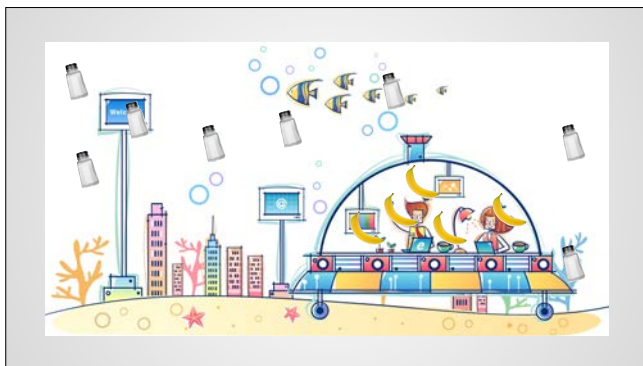




Potassium

Intracellular cation





How much potassium is in you?



How much potassium is in you?



Humans are 60% water
70 kg man x 60% is 42
liters of water

Intracellular potassium

70 kg man x 60% is 42 liters of water

$\frac{2}{3}$ of total body water is intracellular

The intracellular K^+ is 140 mmol/L

42 liters $\times \frac{2}{3} \times 140 = 3,920$ mmol of intracellular K^+



Extracellular potassium

70 kg man x 60% is 42 liters of water

1/3 of total body water is extracellular

The extracellular K⁺ is 4 mmol/L

42 liters x 1/3 x 4 = 56 mmol of extracellular K⁺



How much potassium is in you?

intracellular potassium: 3,920 mmol

extracellular potassium: 56 mmol

total body potassium: 3,976 mmol



How much potassium is in you?

extracellular potassium: 56 mmol

total body potassium: 3,976 mmol

1.4%



How much potassium is in you?

total body potassium: 3,976 mmol

extracellular potassium: 56 mmol

plasma potassium: 12 mmol



The plasma has 12 mmol of K⁺

1 cup of white beans 25 mmol of potassium

1 cup of cooked spinach has 20 mmol of potassium

1 baked potato has 23 mmol of potassium



A banana has 1 mmol of potassium per inch
